

Did you see the Update on Mercury Contamination?

We hope you have seen our recent H2O Tucson newsletter that includes details and answers customers' questions about the mercury contamination incident that occurred in early June. If you have not received a copy of this newsletter in your mail and would like one, please call Tucson Water at 791-4331.



Communication with customers is an important part of Tucson Water's service.



More Water 101

Continued from Front

it must be replenished. This is accomplished by another trade for the sodium in common salt, which is passed through the softener as brine. The calcium and magnesium absorbed by the brine in the trade are washed away and the softener is again ready for more trading.

If you have a question you'd like to have answered as part of our Water 101 series, or if you have a suggestion for a topic, call us at 791-4331 or email to TW_Web1@ci.tucson.az.us.



Water 101 Water Filtration Systems for the Home – Part III

Several customers have asked us to provide some information about home water filtration systems. The home water filtration system you choose depends on what you want to change about your tap water. The three most common home treatment technologies include carbon filtration, membrane filtration, and water softening. This month we look at water softening.

Water Softening Systems – The Trading Game

Hard water is caused by dissolved minerals in the water, primarily calcium and magnesium. (Tucson's water is about average in hardness. Check the water quality map in this newsletter to find out the hardness of your water.) Water softeners are probably the most common method for removing these minerals. Water softeners work by 'trading' sodium for the calcium and magnesium in the water. This process is called "ion exchange" and makes the water soft. When there is no more sodium to trade,

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July 2003 <http://www.cityoftucson.org/water/>



On the Water Front

At Tucson Water, we're always working to improve. We have a number of on-going programs that are helping us become more efficient, more

responsive, and more cost-effective. Two of the areas where we've been especially successful are security and emergency response planning. In fact, our security has been presented as a national model for other water utilities.

But planned improvement is only part of how we progress. As most of us know, we all learn a lot from meeting challenges and dealing with problems. The mercury contamination that we recently experienced in two neighborhoods on the city's eastside is a good example. I assure you, Tucson Water is learning from that experience. We think we did a good job of working with our customers to begin solving the problem quickly. We've made sure this particular issue can't happen again. Now we're reviewing exactly how we responded and what lessons we can learn so we can be even better prepared for any incident that might happen in the future.

I'd like to give a sincere thank you to our customers who live in the neighborhoods where the contamination occurred. They were understanding, sensible, and cooperative and they worked closely

with us to help resolve this problem. Their help played a big part in the speed with which the issue was addressed.

I'd also like to thank the Tucson Water staff. Many of them worked 40 hours straight when the incident first occurred. They were sensitive to our customers' concerns and needs, and intelligent and professional in the way they tackled the problem. In my 30+ years in the water industry, I have not worked with a better group of people. During the long hours it took to resolve this issue, they showed their dedication, professionalism, and work ethic. Working in the laboratory, the meeting room, out in the neighborhood, or at the well site, they really showed how much they care about the customers they serve. I'm proud to work with them.



David V. Modeer
Director, Tucson Water

Visit the Tucson Water Web Site at <http://www.cityoftucson.org/water>

Your Water Connection is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210.

City of Tucson TTY number: 791-2639



Si usted desea este documento escrito en español, por favor, llame al 791-4331.

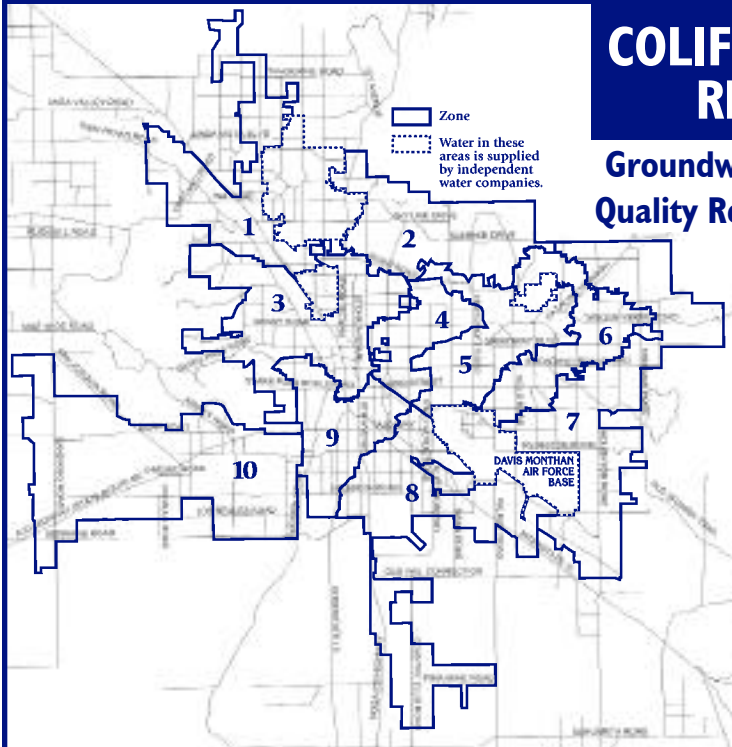
Clearwater Quality Report - June 2003

47*	Sodium (ppm)
282.3	Mineral Content (ppm)
105*	Hardness (ppm)
7.93	pH (units)
Neg*	Coliform Bacteria
1.0	Chlorine level average (ppm)
81.8	Temp (deg F)

* Values for May 2003

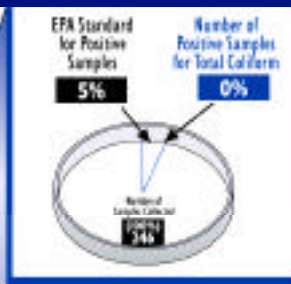
GROUNDWATER QUALITY REPORT - April 2003

Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (ppm)	Average Range	50 48-52	46 42-50	49 33-65	36 27-48	41 34-48	41 28-47	29 22-48	45 41-47	45 40-53	41 40-41	42 22-65
Mineral Content (ppm)	Average Range	388 175-611	371 202-358	356 212-480	259 186-434	263 180-334	255 207-302	228 185-290	337 230-445	299 214-394	219 208-230	289 175-611
Hardness (ppm)	Average Range	221 114-365	145 112-171	171 110-233	92 72-119	115 99-139	108 79-136	106 86-122	147 91-261	121 80-166	77 74-80	127 72-365
pH (units)	Average Range	7.5 7.0-8.1	7.8 7.3-8.3	7.5 7.0-7.9	7.7 7.1-8.1	7.6 7.1-8.1	7.7 7.1-8.2	7.6 7.2-8.1	7.4 7.0-8.0	7.5 7.0-7.8	7.7 7.4-7.9	7.6 7.0-8.3
Temperature (deg F)	Average Range	77 74-80	78 75-82	77 71-82	80 75-85	79 71-84	78 73-84	78 69-81	78 72-84	79 74-84	79 73-84	78 69-85



COLIFORM BACTERIA TESTING RESULTS - April 2003

Groundwater Quality Report



Chlorine Level Average

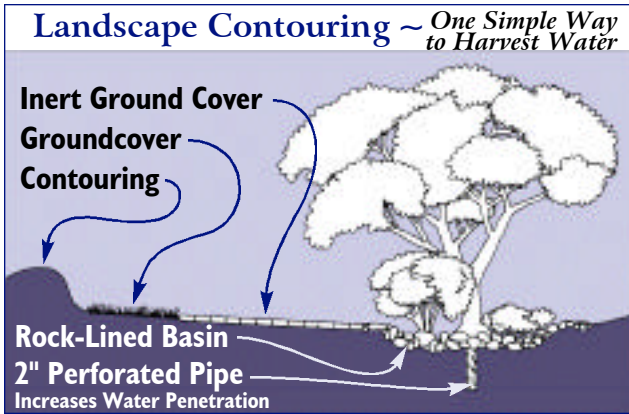


“PPM” means one part per million; 1 ppm = 1 teaspoon in 1,302 gallons

To give you a more accurate measurement of the water quality in your neighborhood, the Tucson Water service area has been divided into 10 zones

based on differences in water pressure and water quality. For a detailed description of the zone boundaries, call 791-4331.

Conservation Corner: Reduce Your Water Use and Reduce Your Water Bill



soaks into the ground in places where it will be useful. This can be as simple as using contoured areas, dikes, or berms so water flows directly onto plants. Other simple passive water harvesting ideas:

- 💧 Create depressions around trees and line them with rocks or mulch to retain moisture
- 💧 Arrange brick, rock or flagstone paving to direct water to plants
- 💧 Dig furrows and channels to direct water to your garden

Chef Pete of Café Conservation reminds you that July is the heart of the water conservation season. Chef Pete is always serving up more ways to save water.

Chef Pete's water conservation recommendation for this month is Water Harvesting.

Water Harvesting

Water harvesting is a traditional practice in the Tohono O'odham nation west of Tucson. It's one of the oldest known gardening methods because it makes sense. Irrigating with rainwater helps conserve every precious drop while saving you money on your monthly water bills.

The two principles of water harvesting are 1) keep water as close to where it falls as is practical, and 2) put it to the best use possible.

If you decide to be a 'water harvester' you can create either a passive or an active harvesting system.

The passive, or "spread and sink", system can be simple and inexpensive. In this method the water is spread out so that it

In active harvesting systems, rainwater is stored and used as needed. Water is collected, usually from roofs, patios or driveways and stored in barrels or cisterns. Rain gutters and pipes can move harvested water to storage containers. If you've ever put a bucket under the eaves when it's raining and then poured it on potted plants, you've used an active water harvesting system.

Proper maintenance is critical to any dependable water harvesting system. Make sure your gutters and downspouts are free of trash, dirt, leaves and other debris. Clean or repair dikes, berms and channels to prevent erosion problems. Make sure if you use a catchbasin or barrel to collect rainwater that you watch for wiggling mosquito larva. Use a commercially available larvicide to keep mosquitos from becoming a problem, and be sure that the water doesn't puddle for more than 24 hours.

Tucson Water has a free brochure on water harvesting. To get one, call us at 791-4331.